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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/900,374	07/06/2001	Krishnan Kumaran	15-11	4294

7590 05/17/2006

Docket Administrator (Rm. 3J-219)
Lucent Technologies Inc.
101 Crawfords Corner Road
Holmdel, NJ 07733

EXAMINER	
DANIEL JR, WILLIE J	

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/900,374	KUMARAN ET AL.	
	Examiner	Art Unit	
	Willie J. Daniel, Jr.	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 December 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14,24 and 26-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14,24 and 26-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to applicant's amendment filed on 12 December 2005. **Claims 1-14, 24,** and **26-28** are now pending in the present application.

Response to Amendment

2. The declaration under 37 CFR 1.132 filed 12 December 2005 is insufficient to overcome the rejection of claims 1-14, 24, and 26-28 as applicable based upon applied reference **Borst et al**. (hereinafter Borst), Bell Labs Technical Journal, "Wireless Simulation and Self-Organizing Spectrum Management", Vol. 2, No. 3, 1997, pp. 81-98, as set forth in the last Office action because:

A declaration and statement of evidence from each person listed as a co-author of the applied reference is required. The declaration solely from co-author Borst is **not sufficient**. When all the declarations and statements of evidence are filed, the Examiner will review and consider the declarations and statements of evidence to determine and weigh the validity and relevance. As applicable in the current claim rejection(s), the applied reference more than adequately provides support and meets the claimed subject matter in which the claim rejections are hereby maintained.

Claim Rejections - 35 USC § 112

3. The 112 rejections applied to the claims are withdrawn, as the proposed claim corrections are approved.

Claim Objections

4. **Claim 1** is objected to because of the following informalities:

   a. **Claim 1** recites the limitation "...the lists..." in line(s) 4 and 8 of the claim. There is insufficient antecedent basis for this limitation in the claim and the claim is being considered as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner suggests, for example, "...the plurality of lists of channel rankings..." as stated in line(s) 3-4 of the claim. Also, the Examiner requests the applicant to be consistent and use the exact terminology as applicable (see and correct similar claims).

   Regarding **Claim 1**, the Examiner requests the applicant to clarify the claim language and provide specific claim language as supported by the specification as well as indicate page(s), line(s), and drawing(s) to support any amendment(s).

   Appropriate correction is required.

5. This list of examples is not intended to be exhaustive. The Examiner respectfully requests the applicant to review all claims and clarify the issues as listed above as well as any other issue(s) that are not listed.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 24, 26, and **28** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Borst et al**. (hereinafter Borst), Bell Labs Technical Journal, "Wireless Simulation and Self-Organizing Spectrum Management", Vol. 2, No. 3, 1997, pp. 81-98 in view of **Jiang et al.** (hereinafter Jiang) (**US 6,535,742 B1**).

Regarding **claim 1**, Borst discloses a process for assigning frequency channels to communications in a cellular wireless system, comprising:

performing a simulation of the system to produce a plurality of lists of channel rankings, the simulation evolving the lists according to an algorithm that dynamically reduces inter-communication interference, the lists of channel rankings prioritizing the channels to service communications by associated base stations (see pg. 82, right col., lines 18-25; pg. 83, right col., lines 5-16; pg. 84, right col., lines 22-31), where the algorithm of the simulation tool organizes a lists of channels according to interference measurements for the base stations of the network in which as the network changes, the algorithm adjusts the system to dynamically adapts to the changes in the system; and

the base stations being configured to assign channels to service communications with mobile units based on the channel rankings in the associated lists (see pg. 82, right col., lines 18-36; pg. 83, right col., lines 5-16; pg. 84, right col., lines 22-31; pg. 90, right col., lines 18-

26), where the system utilizes a simulation tool in which a list of channels are used by the base stations that allocate the channel assignment to mobile stations operating in a sector of a base station. Borst does not specifically disclose having the features sending the lists of produced channel rankings to associated base stations; and wherein the sending includes updating the lists of channel rankings in response to receiving new input data from the base stations. However, the examiner maintains that the features sending the lists of channel rankings to associated base stations; and wherein the sending includes updating the lists of channel rankings in response to receiving new input data from the base stations was well known in the art, as taught by Jiang.

In the same field of endeavor, Jiang discloses the features

sending the lists of channel rankings to associated base stations (10) (see col. 4, line 65 - col. 5, line 1; col. 6, lines 52-56; Figs. 1 and 2 "ref. 230"), where the MSC (60) allocates (e.g., sends) a ranking list of channels to the base station (10) of cell (20); and

wherein the sending includes updating the lists of channel rankings in response to receiving new input data from the base stations (10) (see col. 4, lines 1-48; col. 4, line 65 - col. 5, line 1; col. 6, lines 52-56; Figs. 1 and 2 "ref. 230").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Borst and Jiang to have the features sending the lists of channel rankings to associated base stations; and wherein the sending includes updating the lists of channel rankings in response to receiving new input data from the base stations, in order to have channel allocation scheme that utilizes a centralized

channel allocation while scanning channels for the optimum channel assignment, as taught by Jiang (see col. 3, lines 7-11).

Regarding **claim 2**, the combination of Borst and Jiang discloses every limitation claimed, as applied above (see claim 1), in addition Borst further discloses the process of claim 1, wherein the evolving is constrained to produce less than a preselected amount of call blocking and/or call dropping (see pg. 87, left col., line 34 - right col., line 5; pg. 90, left col., lines 41-44; pg. 94, left col., line 30 - right col., line 1; pg. 95, left col., lines 1-3,7-10; Figs.7-8), where the simulation tool monitors the blocking of calls for a maximum amount of times and dropping of calls according to the threshold along with interference.

Regarding **claim 3**, the combination of Borst and Jiang discloses every limitation claimed, as applied above (see claim 1), in addition Borst further discloses the process of claim 1, wherein one of the produced lists of channel rankings separately ranks the channels for separate angular sectors of the associated base station (see pg. 83, lines 5-16; pg. 84, right col., lines 22-31; Fig. 1), where the system organizes the channels on a per sector basis by considering the neighbor station for improving network performance.

Regarding **claim 4**, the combination of Borst and Jiang discloses every limitation claimed, as applied above (see claim 3), in addition Borst further discloses the process of claim 3, wherein the performing includes producing a list that serially ranks the channels for usage in servicing wireless communications (see pg. 84, right col., lines 22-31), where the channels are ranked in order of interference measurements.

Regarding **claim 24**, Borst discloses a channel allocation system for ranking frequency channels for usage by base stations of a cellular wireless system, comprising:

a processor (e.g., system computer, MSC, BSC) configured to dynamically simulate the cellular wireless system according to an algorithm that dynamically produces lists of frequency channel rankings for the individual base stations in a manner that reduces inter-call interference (see pg. 82, right col., lines 18-36,40-43; pg. 83, right col., lines 5-16; pg. 84, right col., lines 22-31; pg. 90, right col.; Fig. 3), where the algorithm of the simulation tool organizes lists of channels according to interference measurements for the base stations of the network in which the processor would be inherent to run the program; and

the processor being configured to use the input data to determine a starting state for the dynamical simulation (see pg. 82, right col., lines 18-36,40-43; pg. 83, right col., lines 5-16; pg. 84, left col., line 84 - right col., line 31; pg. 90, right col., lines 18-26; Figs. 1-3, 5, and 6), where the computer uses a simulation tool to dynamically allocate channel lists in which the base stations use for communicating with mobile units of each sector. The simulation tool monitors the current status of information provided by the base stations for quantifying the global network. Borst does not specifically disclose having the features a link coupling the processor to the base stations, the link supporting transmissions to the processor of input data from the base stations and transmissions of the produced lists of frequency channel rankings to the base stations; and being configured to transmit the produced lists to the base stations in response to receiving the input data. However, the examiner maintains that the features a link coupling the processor to the base stations, the link supporting transmissions to the processor of input data from the base stations and transmissions of the produced lists of frequency channel rankings to the base stations; and being configured to transmit the

produced lists to the base stations in response to receiving the input data was well known in the art, as taught by Jiang.

Jiang further discloses the features

a link coupling the MSC (60) which reads on the claimed "processor" to the base stations (10), the link supporting transmissions to the processor (60) of input data from the base stations (10) and transmissions of the produced lists of frequency channel rankings to the base stations (10) (see col. 3, lines 54-57; col. 4, line 65 - col. 5, line 1; col. 6, lines 52-56; Figs. 1 and 2 "ref. 230"), where the MSC (60) allocates (e.g., sends) a ranking list of channels to the base station (10) of cell (20) in which the MSC (60) communicates with the base station (10) the link shown in Fig. 1; and

being configured to transmit the produced lists to the base stations (10) in response to receiving the input data (see col. 4, lines 1-48; col. 4, line 65 - col. 5, line 1; col. 6, lines 52-56; Figs. 1 and 2 "ref. 230").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Borst and Jiang to have the features a link coupling the processor to the base stations, the link supporting transmissions to the processor of input data from the base stations and transmissions of the produced lists of frequency channel rankings to the base stations; and being configured to transmit the produced lists to the base stations in response to receiving the input data, in order to have channel allocation scheme that utilizes a centralized channel allocation while scanning channels for the optimum channel assignment, as taught by Jiang (see col. 3, lines 7-11).

Regarding **claim 26**, the combination of Borst and Jiang discloses every limitation claimed, as applied above (see claim 24), in addition Borst further discloses the allocation system of claim 24, wherein the processor is configured to produce separate lists that rank the frequency channels for use in separate angular sectors of at least one of the base stations in assigning channels to support communications (see pg. 83, lines 5-16; pg. 84, right col., lines 22-31; Figs. 1 and 3), where the simulation tool of the network organizes the channels on a per sector basis by considering the neighbor station for improving network performance.

Regarding **claim 28**, the combination of Borst and Jiang discloses every limitation claimed, as applied above (see claim 26), in addition Borst further discloses the allocation system of claim 26, wherein the processor is configured to perform the dynamical simulation based on an event queue containing events for simulating processing of communications with mobile units (see pg. 82, right col., lines 33-36,40-43; pg. 84, left col., line 17 - right col., line 10; pg. 85, right col., lines 19-23,28-40; pg. 87, left col., lines 5-32, right col., lines 16-20; pg. 90, left col., lines 41-45, right col., lines 1-31; pg. 91, right col., lines 4-10; Figs. 1, 3, 5, and 6), where the simulation tool uses parameters to monitor the system while collecting event statistics of the mobile units and base stations located within the network.

Claims 5-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Borst et al.** (hereinafter Borst), Bell Labs Technical Journal, "Wireless Simulation and Self-Organizing Spectrum Management", Vol. 2, No. 3, 1997, pp. 81-98 in view of **Jiang et al.** (hereinafter Jiang) (**US 6,535,742 B1**) as applied to claim 4 above, and further in view of **Jensen** (**US 6,496,698 B2**).

Regarding **claim 5**, the combination of Borst and Jiang teaches of identifying the produced lists of channel rankings (see pg. 84, right col., lines 22-31), where the lists of channels are ranked according to interference. Borst does not specifically disclose having the feature converging to a fixed point for evolution of the lists of channel rankings. However, the examiner maintains that the feature converging to a fixed point for evolution of the lists of channel rankings was well known in the art, as taught by Jensen.

In the same field of endeavor, Jensen teaches the feature converging to a particular point which reads on the claimed "fixed point" for evolution of the lists of frequency groups which reads on the claimed "channel" rankings (see col. 6, lines 11-47; col. 13, line 47 - col. 14, line 30; Figs. 3-5), where the software iterates through changes for optimization of the cell, sector, and system to find the best change to be made for reaching a particular point.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Borst, Jiang, and Jensen to have the feature converging to a fixed point for evolution of the lists of channel rankings, in order to provide a process by which the quality of service provided by a cellular system may be determined in terms of fixed verifiable quantities so that changes may be made to enhance the quality of service, as taught by Jensen (see col. 5, lines 1-7).

Regarding **claim 6**, the combination of Borst, Jiang, and Jensen discloses every limitation claimed, as applied above (see claim 5), in addition Borst further discloses the process of claim 5, wherein the performing comprises:

determining quantities that characterize communications serviced by one of the angular sectors, each of the quantities being indicative of potential inter-call interference for calls serviced by associated ones of the frequency channels (see pg. 83, right. col., lines 5-14; pg. 90, left col., lines 41-45, right col., lines 1-31; pg. 91, right col., lines 4-10; pg. 94, right col., lines 13-19; Figs. 3 and 5), where the simulation tool of the system monitors events to minimize interference between channels of the list; and

re-ranking the list of frequency channels associated with the one of the angular sectors based on the determined quantities (see pg. 83, right col., lines 5-14; pg. 84, left col., line 17 - right col., line 10; pg. 84, right col., lines 22-30; pg. 85, right col., line 43-45; pg. 86, right col., line 4 - pg. 87, left col., line 8; pg. 87, right col., lines 41-43; pg. 90, left col., lines 41-45, right col., lines 1-31; pg. 91, right col., lines 4-10; pg. 94, right col., lines 13-19; Figs. 3 and 5), where the simulation monitors changes in the system for ranking channels based on events in which the re-ranking would be inherent as the system changes due to the events monitored.

Regarding **claim 7**, the combination of Borst, Jiang, and Jensen discloses every limitation claimed, as applied above (see claim 5), in addition Borst further discloses the process of claim 5, wherein the performing comprises:

providing a propagation which reads on the claimed "fading matrix" for the system (see pg. 87, right col., lines 7-24,39-43; pg. 88, left col., lines 22-27, 33 - right col. line 40; Fig.

4); and

wherein the performing includes assigning new calls to base stations based in part on the fading matrix (see pg. 84, right col., lines 12-19,41-43; pg. 85, right col., lines 16-23; pg. 87, right col., lines 7-24,39-43; pg. 88, left col., lines 22-27, 33 - right col. line 40; Figs. 3 and 4), where the simulation takes into account fading for assigning channels to new call.

Regarding **claim 8**, the combination of Borst, Jiang, and Jensen discloses every limitation claimed, as applied above (see claim 5), in addition Borst further discloses the process of claim 5, further comprising:

providing input data on locations of base stations and distributions of mobile units (see pg. 84, left col., line 17 - right col., line 10; pg. 85, right col., lines 19-23,28-40; pg. 87, left col., lines 5-32, right col., lines 16-20; pg. 90, left col., lines 41-45, right col., lines 1-31; pg. 91, right col., lines 4-10; Figs. 1, 3, 5, and 6), where the simulation tool uses parameters to monitor the system while collecting event statistics of the mobile units and base stations location within the network; and

wherein the performing is based in part on the provided input data (see pg. 84, left col., line 17 - right col., line 10; pg. 85, right col., lines 19-23,28-40; pg. 87, left col., lines 5-32, right col., lines 16-20; pg. 90, left col., lines 41-45, right col., lines 1-31; pg. 91, right col., lines 4-10; Figs. 1, 3, 5, and 6).

Regarding **claim 9**, the combination of Borst, Jiang, and Jensen discloses every limitation claimed, as applied above (see claim 5), in addition Borst further discloses the process of claim 5, wherein the performing includes simulating a retrialing mode which reads on the claimed "redialing" of blocked calls (see pg. 87, left col., line 34 - right col., line 5;

Fig. 3), where the simulation tool has a retrialing mode that simulates the redialing of blocked calls.

Regarding **claim 10**, the combination of Borst, Jiang, and Jensen discloses every limitation claimed, as applied above (see claim 5), in addition Borst further discloses the process of claim 5, wherein the performing includes simulating maintenance processing of calls based on associated power levels (see pg. 85, left col., lines 1-6,21-23; pg. 89, left col., line 11 - right col., line 9; Fig. 3), where the simulation monitors the interference in correlation to the power level.

Regarding **claim 11**, the combination of Borst, Jiang, and Jensen discloses every limitation claimed, as applied above (see claim 5), in addition Borst further discloses the process of claim 5, wherein the performing includes assigning new calls according to a time division-multiplexing scheme (see pg. 83, right col., lines 5-16; pg. 84, right col., lines 12-30; Fig. 2).

Regarding **claim 12**, Borst discloses the process of claim 5, further comprising:

servicing new calls in the base stations based on priorities derived from the lists of channel rankings (see pg. 84, right col., lines 12-30; pg. 82, right col., lines 18-36; pg. 83, right col., lines 5-16), where the calls of the system are assigned to channels of the list according to the interference measurements. Borst does not specifically disclose having the feature sent lists of channel rankings. However, the examiner maintains that the feature sent lists was well known in the art, as taught by Jiang.

The combination of Jiang and Jensen as applied in claim 5, Jiang further discloses the

feature sent lists of channel rankings (see col. 3, lines 54-57; col. 4, line 65 - col. 5, line 1; col. 6, lines 52-56; Figs. 1 and 2 "ref. 230"), where the MSC (60) allocates (e.g., sends) a ranking list of channels to the base station (10) of cell (20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Borst, Jiang, and Jensen to have the feature sent lists of channel rankings, in order to have channel allocation scheme that utilizes a centralized channel allocation while scanning channels for the optimum channel assignment, as taught by Jiang (see col. 3, lines 7-11).

Regarding **claim 13**, the combination of Borst, Jiang, and Jensen discloses every limitation claimed, as applied above (see claim 5), in addition Borst further discloses the process of claim 5, wherein the algorithm lowers interference based solely on uplink communications (see pg. 84, right col., lines 22-27; pg. 85, left col., lines 1-38; pg. 86, left col., line 7 - right col., line 2; pg. 94, right col., lines 8-11), where the algorithm for the simulation tool uses the uplink measurements for assigning the channels on the list to lower interference.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Borst et al.** (hereinafter Borst), Bell Labs Technical Journal, "Wireless Simulation and Self-Organizing Spectrum Management", Vol. 2, No. 3, 1997, pp. 81-98, **Jiang et al.** (hereinafter Jiang) (**US 6,535,742 B1**), and **Jensen** (**US 6,496,698 B2**) as applied to claim 5 above, and further in view of **Anderson et al.** (hereinafter Anderson) (**EP 0817521 A2**).

Regarding **claim 14**, the combination of Borst, Jiang, and Jensen discloses every limitation claimed, as applied above (see claim 5), in addition Borst further of the algorithm monitoring the interference of the downlink (see pg. 84, right col., lines 22-27; pg. 85, left col., lines 1-38; pg. 86, right col., lines 1-2; pg. 95, left col., lines 15-18), where the algorithm monitors the downlink quality with the current simulation tool. The combination of Borst, Jiang, and Jensen does not specifically disclose the feature lowering the interference based on the downlink. However, the examiner maintains that the feature lowering the interference based on the downlink was well known in the art, as taught by Anderson.

In the same field of endeavor, Anderson teaches the feature lowering the interference based on the downlink (see pg. 3, lines 20-40,44-50; pg. 4, lines 12-20,29-32; pg. 5, lines 6-9,13-55; Claims 20-21; Fig. 2), where the channels are prioritized in list according to the downlink.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Borst, Jiang, Jensen, and Anderson to have the feature lowering the interference based on the downlink, in order to have dynamic channel assignment for wireless networks, full automation, easy system growth and higher, as taught by Anderson (see pg. 2, lines 39-40).

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Borst et al.** (hereinafter Borst), Bell Labs Technical Journal, "Wireless Simulation and Self-Organizing Spectrum Management", Vol. 2, No. 3, 1997, pp. 81-98 in view of **Jiang et al.** (hereinafter Jiang) (**US 6,535,742 B1**) as applied to claim 24 above, and further in view of **Greene, Sr. et al.** (hereinafter Greene) (**US 5,926,763**).

Regarding **claim 27**, Borst teaches of having a plurality of base stations (see pg. 83, right col., lines 5-14; pg. 84, right col., lines 17-31; pg. 90, right col. lines 18-26; Figs. 1-3), where the base stations uses the list to allocate channels to mobile unit in the sectors. Borst does not specifically disclose having the feature each base station having a data storage device configured to store one of the produced lists received from the processor. However, the examiner maintains that the feature one of the produced lists received from the processor was well known in the art, as taught by Jiang.

Jiang further discloses the feature one of the produced lists received from the processor (60) (see col. 3, lines 54-57; col. 4, line 65 - col. 5, line 1; col. 6, lines 52-56; Figs. 1 and 2 "ref. 230"), where the MSC (60) allocates (e.g., sends) a ranking list of channels to the base station (10) of cell (20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Borst and Jiang to have the feature one of the produced lists received from the processor, in order to have channel allocation scheme that utilizes a centralized channel allocation while scanning channels for the optimum channel assignment, as taught by Jiang (see col. 3, lines 7-11). The combination of Borst and Jiang does not specifically disclose having the feature each base station has a data storage

device configured to store. However, the examiner maintains that the feature each base station has a data storage device configured to store was well known in the art, as taught by Greene.

In the same field of endeavor, Greene teaches the feature that each land station (12) which reads on the claimed "base station" has a memory (50) which reads on the claimed "data storage device" configured to store (see col. 7, lines 15-17,31-44; Figs. 3-7), where the memory stores a list of channels in a table for the base station.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Borst, Jiang, and Greene to have the feature each base station to have a data storage device configured to store, in order to have a cellular communication system in which voice channels usage is biased to rank potentially higher quality channels over potentially lower quality channels, as taught by Greene (see col. 2, lines 65-67; col. 10, lines 25-31).

Response to Arguments

7. Applicant's arguments with respect to **claims 1-14, 24,** and **26-28** have been considered but are moot in view of the new ground(s) of rejection.

8. The declarations under 37 CFR 1.132 filed 07 June 2005 and 12 December 2005 are insufficient to overcome the rejection of claims 1-14, 24, and 26-28 as applicable based upon applied reference **Borst et al.** (hereinafter Borst), Bell Labs Technical Journal, "Wireless Simulation and Self-Organizing Spectrum Management", Vol. 2, No. 3, 1997, pp. 81-98, as set forth in the last Office action because:

A declaration and statement of evidence from each person listed as a co-author of the applied reference is required. The declaration solely from co-author Borst is **not sufficient**. When all the declarations and statements of evidence are filed, the Examiner will review and consider the declarations and statements of evidence to determine and weigh the validity and relevance. As applicable in the current claim rejection(s), the applied reference more than adequately provides support and meets the claimed subject matter in which the claim rejections are hereby maintained.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Wang discloses "Method and Apparatus For Dynamic Channel Allocation".

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willie J. Daniel, Jr. whose telephone number is (571) 272-7907. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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